

App. No. 09/788,329
Amendment Dated: August 3, 2006
Reply to Office Action of May 3, 2006

REMARKS/ARGUMENTS

Claims 1-20 remain in this application for further review. In light of the remarks set forth below, Applicants assert that the claims are in condition for allowance. Applicants respectfully request reconsideration and allowance of the same.

I. Rejection of Claims 1-20 under 35 U.S.C. §103(a)

Claims 1-6, and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,292,669 issued to Meuronen in view of U.S. Patent 5,628,051 issued to Salin and further in view of U.S. Patent 5,828,847 issued to Gehr et al. Claims 7-13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Meuronen in view of Salin and Gehr and further in view of U.S. Patent 6,560,456 issued to Lothia et al. Claims 14-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Meuronen in view of Salin and Gehr and further in view of U.S. Patent 5,457,680 issued to Kaam et al. Applicants respectfully traverse the aforementioned rejections. Independent claim 1 has been amended to clarify elements of the claims. Independent claim 1 recites the following combination of elements not taught or otherwise suggested by the cited references:

"A computer-implemented method for routing messages, *received by a mobile device, to an application of the mobile device*, comprising"

"providing a plurality of prioritized providers, wherein each provider is associated with a message type"

"receiving a message *on the mobile device*"

"routing the message to the plurality of *prioritized providers of the mobile device*, wherein the provider with the first highest priority receives the message first"

"routing the message to the provider with the second highest priority when the *provider with the first highest priority does not recognize the message type*"

"associating the message with at least one of the plurality of prioritized providers when the at least one of the plurality of prioritized providers *recognizes the message type*"

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"informing an application of the mobile device and associated with the provider that the message is waiting without the application sending a query to receive an indication that the message is waiting"

Applicant asserts that the combination of elements recited in independent claim 1 clearly distinguish the references in the current office action.

A. Meuronen Does Not Teach Routing A Message Received On The Mobile Device

The current Office Action asserts that Meuronen teaches "receiving a message." *Office Action*, at page 3. Applicants assert that Meuronen teaches a mobile switching center and fails to teach "receiving a message on the mobile device" in combination with the other elements of independent claim 1. Meuronen teaches a mobile switching center as follows:

"A mobile switching centre MSC attends to switching incoming and outgoing calls. It performs tasks similar to those carried out by a centre in the public telephone network (PSTN). In addition, it also performs operations typical of mobile telephone traffic only, such as e.g. subscriber location administration, in co-operation with the subscriber registers of the network. The subscriber registers in the GSM system are called a home location register HLR and a visitor location register VLR. HLR stores permanently subscriber data and information on the VLR within whose area a MS is located. The visitor location register VLR again stores subscriber data of a mobile station MS temporarily during the time the mobile station is in the area of the mobile switching centre MSC associated with the visitor location register VLR. Typically, one VLR serves one mobile switching centre MSC. Mobile stations MS are connected to the centre MSC by means of base station systems BSS. The base station system BSS comprises base station controllers BSC and base stations BTS. One base station controller BSC is used for the control of several base stations BTS." Meuronen, at Column 3, Lines 28-47. Emphasis added.

As indicated by the above portion of Meuronen, Meuronen is concerned with the routing of messages transmitted from a mobile device. Meuronen does not teach or otherwise discuss the routing of messages received on a mobile device.

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B. Meuronen Does Not Teach Routing A Message Received On The Mobile Device Based On The Message Type

The current Office Action states that Meuronen teaches "routing a message to the plurality of providers until at least one provider recognizes the message type associated with the message." Applicants respectfully traverse this proposition. As set forth above, independent claim 1 recites a "plurality of prioritized providers of the mobile device." Meuronen teaches that a subscriber gives a value of a desired PID parameter with a short message. When the message is transmitted a short message gateway picks the PID parameter from the short message and performs a database search on the basis of the parameter and then submits a short message to the routing address obtained from the search. Meuronen teaches these elements as follows.

"In a preferred embodiment of the invention, a database DB in which information on the short message forms available to the subscribers, including related routing information, is stored, is connected to at least one short message gateway MSC of the mobile communication system. In this case the subscriber only has to give the value of the desired PID parameter with the short message, and forward the short message without attending to the address of the short message service centre to be supplied. *The short message gateway MSC, comprising the database DB, picks the PID parameter from the short message, performs a database search on the basis of the parameter and submits the short message to the routing address obtained by the database search.*" Meuronen, at Column 5, Lines 52-65. Emphasis added.

C. Salin Fails To Teach Informing An Application Of The Mobile Device And Being Associated With The Provider That The Message Is Waiting Without The Application Sending A Query To Receive An Indication That The Message is Waiting

The current Office Action contends that Salin teaches "informing an application associated with the provider that the message is waiting without the application sending a query to receive an indication that the message is waiting. Independent claim 1 has been amended to recite "informing an application of the mobile device." To the contrary of the assertions set forth in the Office Action, Salin teaches telephone network routing as follows:

"In other words, the invention allows a short message stored in a short message service centre of a *mobile telephone network* to be forwarded to the subscriber even in cases where an *indication message sent by the mobile exchange of the subscriber location area to the HLR of the subscriber* so as to

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indicate that the subscriber is again reachable is lost, and the HLR of the subscriber conceives that the subscriber is not reachable, *i.e. that the subscriber is not connected to the mobile telephone network.*" Salin, at Column 4, Lines 36-44. Emphasis added.

As indicated above, Salin teaches routing in a telephone network system. Salin does not teach routing messages received by mobile telephone to an application of the mobile device. Salin also fails to teach informing an application of the mobile device in associated with the provider that the message is waiting. Salin teaches as follows:

"One or more (or all) of *the mobile exchanges of the network may operate as a GMSC.* A speech channel connection can be switched from the GMSC to any other mobile exchange MSC of the network. The GMSC also has a signalling connection with the HLR. The HLR, in turn, has a signalling connection with the VLRs. Alternatively, the exchange of another data transmission system, such as an ISDN exchange, may also operate as a GMSC. FIG. 1A shows short message service centres SC1 and SC2 which deliver a short message over the cellular radio network to the mobile telephone MS of the B subscriber. If the short message cannot be delivered to the subscriber, the SC stores it in its memory, and the short message will be delivered to the subscriber MS when the subscriber is again reachable, *provided that the SC is notified that the subscriber has become reachable.*" Salin, at Column 7, Line 54 through Column 8, Line 2. Emphasis added.

"When the time supervision set in the HLR according to the invention expires 701, *the HLR sends 702 a short-message transmission starting message (Alert SC) to the SC storing one or more short messages to be transmitted to the subscriber. Upon receiving the starting message (Alert SC) the SC sends the short message to the GMSC/TW MSC, which sends 704 a routing information request message (SendRoutingInfoForShortMessage) to the HLR of the subscriber to which the short message to be transmitted is addressed.* The HLR sends 705 routing information (RoutingInformation) to the GMSC/TW MSC, which sends 706, on the basis of the routing information, the short message to be transmitted (ForwardShortMessage) to the VMSC of the location area of the mobile subscriber, and the VMSC forwards it to the subscriber." Salin, at Column 8, Lines 12 through 26. Emphasis added.

As indicated above, Salin teaches that the "SC is notified that the subscriber has become reachable." Salin also teaches that the SC is notified that the subscriber has become reachable and the subscriber has entered a particular location area. By reachable, Applicants understand that Salin is teaching that a subscriber has reached a physical location where they can receive a

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message transmission. The "alert SC" taught in Salin is an alert to reroute transmissions to the VMSC. Applicants can find no teaching of informing an application of the mobile device in associated with the provider that the message is waiting." Or that "the informing" occurs "without the application sending a query to receive an indication that the message is waiting." The "alert SC" message recited in Salin is different from the "informing" step recited in Independent Claim 1.

D. Gehr Does Not Teach Priority Routing Based On A Message Type

The current Office Action contends that Gehr teaches "prioritized providers and that the provider with the highest priority receives a message first in routing the message to the provider with the second highest priority when the first highest priority rejects a message." *Office Action*, at page 4. Independent Claim 1 has been amended as set forth above to recite "routing the message to the provider with the second highest priority when the provider with the first highest priority does not recognize the message type." Gehr teaches "dynamic server switching from maximum server availability and load balancing." Gehr teaches as follows:

"The above described problems are solved and a technical advance achieved in the field by the method and apparatus for dynamic server switching for *maximum availability and load balancing*. The preferred embodiment of this dynamic server switching system uses a client communication interface exception handling routine which enables the client processes to redirect requests to alternate servers with minimal effort when the designated primary server or communication mode is unavailable. The dynamic server switching system also automatically returns to a normal configuration when the fault has been cleared. The use of a common client communication interface based fault tolerance scheme significantly reduces the client process development costs and facilitates the portability of the fault tolerance solution architecture." *Gehr*, at Column 2, Lines 27-41. Emphasis added.

"This is accomplished by maintaining a list in each client communication interface component which identifies the primary server for that client and the preferred communication method as well as a hierarchy of successive alternate servers and communication method pairs. In the event that *the client does not have requests served by the designated primary server or the designated communication method, the client communication interface traverses the list to ascertain the identity of the first available alternative server-communication method pair.*" *Gehr*, at Column 2, Lines 56-65. Emphasis added.

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As indicated in the above cited portions and in the rest of the Gehr reference, Gehr pertains to routing server requests to alternate servers based on the current load and resources being utilized on the server. Stated another way, Gehr teaches routing based on the usage of the server. Accordingly, Gehr fails to teach routing based on a message type.

In light of the above arguments, Applicants assert that Independent Claim 1 is allowable over the cited references. Regarding Independent Claim 7, 14 and 20, Applicants rely on the arguments set forth above in support of those claims. In further regard to Independent Claim 20, Independent Claim 20 recites "indicating that the message is recognized." Independent Claim 20 also recites that "associating the recognized message with the recognized provider." Independent Claim 20 continues by reciting that "requesting, by the application, delivery of the message." Claim 20 further recites "associating the request with the recognized provider" and "formatting the message for the application." Applicants can find no teaching of these elements in the references cited in the current Office Action.

Claims 2-6, 8-13 and 15-19 ultimately depend from Independent Claims 1, 7, and 14, respectively. Independent Claims 1, 7, and 14 are thought allowable for the reasons set forth above. Accordingly, Applicants believe that the dependent claims should be found allowable for at least those same reasons.

II. Proposed Combination of References Would be Detrimental

Meuronen teaches a networked routing system that performs a database search based on an identifier. The database search identifies an address to send the message. Gehr teaches routing requests based on the available resources of the database. If these two references were combined, the resulting combination would be detrimental to Meuronen. Messages would be routed based on the resources available to the mobile switching center and not based on the mobile switching center required to get the message to the message destination. This would result in the message being sent to the wrong message switching center which could also result in an inoperative system and network inefficiencies. Accordingly, Applicants believe that the references are not combinable as proposed.

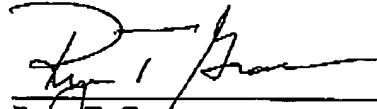
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III. Request for Reconsideration

In view of the above amendments and remarks, applicants respectfully request a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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